

Claims

[c1] A secure entry system for a building having a plurality of units provided therein, each of said units permitting only entry of a designated person thereto, said system comprising: an administration server, which is provided in said building, operable to administrate a computer network system in said building; and at least one interconnecting device operable to connect said administration server and respective network devices in said plurality of units, wherein said administration server sets said interconnecting device to assign a plurality of VLANs to each of said units, respectively, in such a manner that a VLAN assigned to one of said units is different from VLANs assigned to respective others of said units to provide secure entry to said units and said computer network system in the building.

[c2] A secure entry system for a building as claimed in claim 1, further comprising a user certifying unit operable to obtain identifying information of a person trying to enter one of said units in the building from said person to certify whether or not said person is a designated person based on said identifying information and to permit only said designated person to enter said one of said units in the building.

[c3] A secure entry system for a building as claimed in claim 1, wherein said administration server administrates an entry of a user of each of said units to said each of said units and an entry of one of said respective network devices by said user to said computer network system.

[c4] A secure entry system for a building as claimed in claim 3, wherein said administration server assigns closed-space identifying information to each of said plurality of units, said closed-space identifying information being information for identifying a corresponding one of said plurality of units, and each of said plurality of units permits said user having said closed-space identifying information assigned to said each of said units to enter said corresponding one of each of said plurality of units.

[c5] A secure entry system for a building as claimed in claim 3, wherein said administration server assigns VLAN identifying information to each of said VLANs respectively assigned to said plurality of units, said VLAN identifying information being information for identifying a corresponding one of said VLANs, and

said administration server permits one of said network devices that sent said VLAN identifying information assigned to one of said VLANs identified by said sent VLAN identifying information, to enter said computer network system.

[c6] A secure entry system for a building as claimed in claim 3, wherein said administration server stores a history of the entry of said user of said each of said units to said each of said units and a history of the entry of said one of said network devices by said user to said computer network system.

[c7] A secure entry system for a building as claimed in claim 1, wherein said administration server assigns said plurality of VLANs to said units, respectively, to be different from a further VLAN assigned to said administration server.

[c8] A secure entry system for a building as claimed in claim 7, wherein said administration server assigns said further VLAN, which is assigned to said administration server, to said interconnecting device.

[c9] A secure entry system for a building as claimed in claim 1, wherein said administration server obtains at least one of a communication amount and a communication time period for each connection port of said interconnecting device, and controls communication at said each connection port of said interconnecting device based on said at least one of said communication amount and said communication time period.

[c10] A secure entry system for a building as claimed in claim 1, further comprising an entrance server operable to administrate an entry of each of said network devices in said plurality of units to said computer network system.

[c11] A secure entry system for a building as claimed in claim 10, wherein said entrance server has an entrance database operable to store device identifying information for identifying each of said network devices, and permits a corresponding one of said network devices that has said device identifying information stored in said entrance database to enter said computer network system.

[c12] A secure entry system for a building as claimed in claim 11, wherein said entrance database stores a MAC address of said each of said network devices as said device identifying information, and

said entrance server permits said one of said network devices that has said MAC address stored in said entrance database to enter said computer network system.

[c13] A secure entry system for a building as claimed in claim 12, further comprising a DHCP server operable to assign, in a case where it is determined that said MAC address of said one of said network devices is stored in said entrance database, an IP address to said one of said network devices.

[c14] A secure entry system for a building as claimed in claim 10, wherein said entrance server has an entrance database operable to store user identifying information for identifying a corresponding user of said each of said network devices, and permits a corresponding one of said network devices that sent said user identifying information stored in said entrance database to enter said computer network system.

[c15] A secure entry system for a building as claimed in claim 10, wherein said administration server assigns, to said entrance server, a VLAN that allows said entrance server to communicate with said plurality of VLANs respectively assigned to said plurality of units.

[c16] A secure entry system for a building as claimed in claim 1, further comprising a shared server operable to give a plurality of said network devices common information that is common thereto, each of said plurality of units having therein at least one of said plurality of network devices.

[c17] A secure entry system for a building as claimed in claim 16, wherein said administration server assigns, to said shared server, a VLAN that allows said shared server to communicate with said plurality of VLANs respectively assigned to said plurality of units.

[c18] A secure entry system for a building as claimed in claim 1, further comprising a DHCP server operable to assign an IP address to each of said respective network devices in said plurality of units.

[c19] A secure entry system for a building as claimed in claim 18, wherein said administration server assigns, to said DHCP server, a VLAN that allows said DHCP server to communicate with said plurality of VLANs respectively assigned to said plurality of units.

[c20] A secure entry system for a building as claimed in claim 1, wherein each of said units includes an abnormal-state detecting unit operable to detect an abnormal state in a

corresponding one of said each of said units and to notify said administration server of a detection thereof, said abnormal-state detecting unit being connected to a connection port of said interconnecting device other than a connection port to which one of said network devices is connected.

[c21] A multi-unit building having a secure entry system for a plurality of closed spaces provided therein, each of said closed spaces limiting access thereto to an insider of said closed space, said building comprising:
an administration server that administrates a computer network system in said building;
and
an interconnecting device that connects said administration server and a plurality of network devices in said plurality of closed spaces, wherein
each of said plurality of closed spaces has a corresponding VLAN assigned thereto based upon said administration server setting said interconnecting device such that each VLAN assigned to said plurality of closed spaces is different from respective other VLANs assigned to others of said closed spaces; and
said administration server limits access to said each of said plurality of closed spaces and said computer network system in the building to a designated insider.